

WHAT IS CLAIMED IS:

- 1 1. A cannula, comprising:
2 a body having a proximal end and a distal end, the body
3 having a wall defining a lumen extending from the proximal end to the
4 distal end, the lumen having a longitudinal axis; and
5 a plurality of apertures in the wall interconnected with the
6 lumen, wherein each of the apertures has a longer major axis and a
7 shorter minor axis, and wherein the longer major axis is perpendicular to
8 the longitudinal axis of the lumen.
- 1 2. The cannula of claim 1, wherein the cannula is a venous
2 cannula.
- 1 3. The cannula of claim 1, wherein the apertures are eye-
2 shaped.
- 1 4. The cannula of claim 1, wherein the apertures are oval.
- 1 5. The cannula of claim 1, wherein the apertures are a shape
2 defined by first and second arcuate portions that intersect with one
3 another at two corners.
- 1 6. The cannula of claim 1, wherein the apertures are arranged
2 into a plurality of rows generally extending along the longitudinal axis of
3 the lumen.
- 1 7. The cannula of claim 6, wherein the rows are evenly
2 distributed on the body and the apertures of adjacent rows are offset
3 such that the apertures in the adjacent rows are different distances from
4 a distal tip of the body.

1 8. A cannula, comprising:
2 a body having a proximal end and a distal end, the body
3 having a wall defining a lumen extending from the proximal end to the
4 distal end, the lumen having a longitudinal axis; and
5 a plurality of apertures in the wall, wherein the apertures are
6 eye-shaped.

1 9. The cannula of claim 8, wherein the cannula is a venous
2 cannula.

1 10. The cannula of claim 8, wherein each of the apertures has a
2 longer major axis and a shorter minor axis, and wherein the longer major
3 axis is perpendicular to the longitudinal axis of the lumen.

1 11. The cannula of claim 10, wherein the apertures are a shape
2 defined by first and second arcuate portions that intersect with one
3 another at two corners.

1 12. The cannula of claim 8, wherein the apertures are arranged
2 into four rows generally extending along the longitudinal axis of the
3 lumen.

1 13. The cannula of claim 12, wherein the rows are evenly
2 distributed on the body and the apertures of adjacent rows are offset
3 such that the apertures in the adjacent rows are different distances from
4 a distal tip of the body.

1 14. A method of making a cannula, comprising the steps of:
2 forming a cannula body having a wall defining a lumen;
3 bending the cannula body in a first direction such that the
4 cannula body has a concave side and a convex side;

5 punching an oval aperture into the concave side of the body;
6 and
7 straightening the cannula body.

1 15. The method of claim 14, wherein the wall is formed by
2 extruding a plastic material.

1 16. The method of claim 15, wherein the plastic material is
2 polyurethane.

1 17. The method of claim 14, wherein the body is formed by a dip
2 molding process.

1 18. The method of claim 14, wherein the cannula is a venous
2 cannula.

1 19. The method of claim 14, wherein the oval aperture has a
2 longer major axis and a shorter minor axis, and wherein the longer major
3 axis is perpendicular to a longitudinal axis of the lumen.

1 20. The method of claim 14, further comprising the step of
2 punching a first row of oval apertures extending along the lumen into the
3 concave side of the body before straightening the cannula body.

1 21. The method of claim 20, further comprising:
2 bending the cannula body in a second direction such that a
3 different portion of the wall forms the concave side of the body; and
4 punching a second row of oval apertures extending along the
5 lumen in the concave side of the body.

1 22. The method of claim 21, wherein the first and second rows
2 are offset such that each aperture is a different distance from a distal tip
3 of the body.